

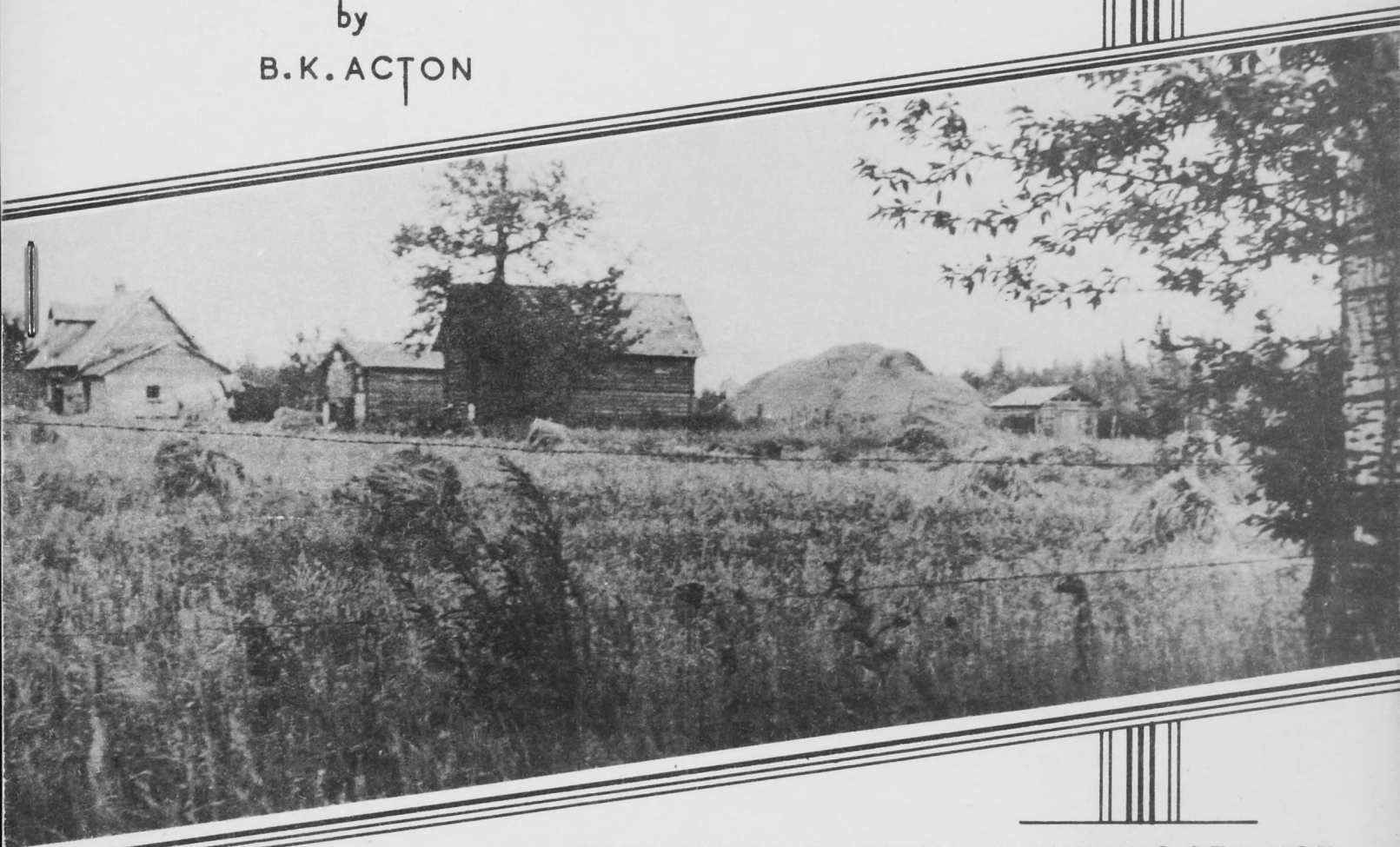
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# FARMING ON BUSH LANDS AT DEBOLT—PEACE RIVER ALBERTA • 1945

by  
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IN CO-OPERATION WITH THE  
DEPARTMENT OF POLITICAL ECONOMY  
UNIVERSITY OF ALBERTA

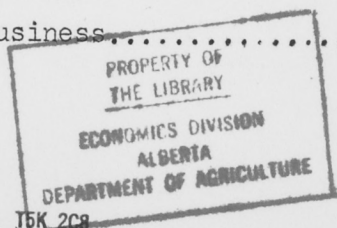
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## SUMMARY OF THE MORE IMPORTANT FINDINGS AND CONCLUSIONS

1. The Debolt district borders the Edmonton to Grande Prairie highway between Sturgeon Lake and the Smoky River. Grande Prairie, which is the nearest rail shipping point, is forty to sixty-five miles from most of the settlers.

The climate is similar to that prevailing throughout the Peace River or the parkland areas of the province. Annual precipitation averages between 16 inches and 17 inches and the days are usually sunny and bright in both summer and winter. The topography is level to undulating, except for the deep gorges of the Smoky River and its tributaries, which form the main drainage channel of the area. The soil is predominately grey wooded and of a heavy texture. A dense growth of bush (mostly poplar trees) covers the unimproved land.

2. For the year 1944, grain yields averaged: wheat, 17 bus.; oats, 29 bus.; and barley, 15 bus. per acre. Average yields for the 24-year period (1921 to 1944) in Crop District 15, in which the Debolt district is located, were: wheat, 22 bus.; oats, 37 bus.; and barley, 26 bus. per acre. Long-time average yields in the adjacent Crop District No. 16 were similar. This suggests that grain yields at Debolt in the long run would be about the same as the 24-year average for Crop Districts 15 and 16.

The production of legume seeds, such as alfalfa, alsike and alta-swede clover have been increasing in importance, -both because legumes aid in improving the soil, and because present prices make it a very worthwhile crop to grow.

3. Data for this study were obtained from personal interviews with forty-five farmers, resident in the district, and pertain to the business year May 1, 1944 to May 1, 1945. The farm records were first grouped according to type for analysis, the types being off-type and mixed farms. The latter group was divided into sub-groups by size of farm (acres cropland). These groups were named and defined as follows:

- (1) Off-Type (15): Those farms having less than eight productive animal units.
- (2) Mixed Farms (30): Those farms having eight or more productive animal units.
  - (a) Small Mixed Farms (16): Those farms having less than 100 acres of cropland.
  - (b) Large Mixed Farms (14): Those farms having 100 acres or more of cropland.

4. The average acreage of cropland by groups was: off-type farms, 88 acres; small mixed, 76 acres; and large mixed farms, 171 acres. In the off-type group, receipts were derived mainly from crop sales and non-farm work, while on the mixed farms, revenue was received from crop,

live stock, and farm produce sales, also from non-farm work. To the mixed farmers, hog production was an important source of income during the war years because a hog enterprise could be quickly started with a small capital outlay. The 'family net income' from all sources (the surplus remaining for payment of debts or for savings) averaged: on off-type farms, \$194; on small mixed farms, \$270; and on large mixed farms, \$539. Included in this surplus were amounts of \$355, \$288, and \$253 (for off-type, small mixed, and large mixed, respectively), which were derived from sources off the farm. Because of a need for lumber since the war and the construction of the Alaska Highway, there has been an opportunity for settlers to avail themselves of non-farm work.

The analysis indicated that there was an association between the type of farming and the acres of cropland, and the success of the farm business. The mixed farmers had greater earnings and a greater increase in net worth, for the business year, than did the off-type farmers. During the business year the large mixed farmers also made greater earnings and increased their net worth more than the small mixed farmers.

5. A study similar to that undertaken in 1945 was made in the Debolt district in 1942. A comparison of the farm records for the two periods was made, in order to measure the progress and note the change in the financial position of the settlers under a wartime economy. It was found that settlers had increased their average cultivated acreage per farm from 77 to 108 acres. Even with more spent on living, they had a surplus, for payment of debts or for savings, of \$326 in 1945 as compared with \$277 in 1942. War-time demands and prices for agricultural products thus enabled farmers to make greater earnings and to build their farms into more efficient units.

6. The probable returns of the average farm in the Debolt district were calculated by using long-time average yields and prices. It was found that, over a period of years, the average farmer having 100 acres of cropland could expect to earn a surplus of approximately \$215 per year. This suggested that approximately 100 acres of cultivated land was a minimum requirement of successful farming in the district.

7. The possibilities of further settlement were appraised. There is room for some additional settlement within the district studied, but soil surveys now underway are not sufficiently far advanced for an accurate statement to be made of the extent of this.

## FARMING ON BUSH LANDS AT DEBOLT--PEACE RIVER, ALBERTA 1945

B.K. Acton<sup>1/</sup>

### INTRODUCTION

This study of farming at Debolt in the Peace River is a story of the experiences of settlers in developing farms from wooded homesteads under a wartime economy. Increased demand, reflected in higher prices for agricultural products during the war years, has enabled farmers to 'further push the trees away from the doorstep,' to acquire more machinery and live stock, and to develop their holdings into farm units that will produce sufficient income to allow these people a higher level of living. The story of the farm organization as developed by farmers after long years of experience, and the level of living they are able to maintain from the earnings of their labour, should aid in directing the thoughts of new settlers to some of the specific factors affecting successful farming, such as, acres of cropland, amount of capital required, and the type of farming most suitable to the region. It should also help farmers already established to appraise their own farm businesses with a view to ascertaining ways and means of increasing their incomes.

The study of the Debolt district in the Peace River was undertaken in 1945 by the Economics Division, Dominion Department of Agriculture, in co-operation with the Department of Political Economy, University of Alberta. A similar survey was made in 1942 of the Debolt district as part of a larger study of the Peace River area. In both 1942 and 1945, settlers contributed information for the preceding farm business year on land utilization, type of farming, level of living, capital investment and earnings. Thus it is possible to compare the income of farmers and measure their progress during a three-year period which coincided with wartime conditions.

The purpose of this study is similar to those previously undertaken in the wooded regions of Alberta.<sup>2/</sup> It is to gather and compile factual data on the experiences of farmers, and the problems associated with the farm business, which will aid in the direction and success of settlement.

1/

Agricultural Economist, Dominion Department of Agriculture.

2/

"Pioneer Farming and Municipal Finance in the Sangudo-Winfield Area of Alberta, 1941," B.K. Acton and C.C. Spence (Bulletin No. 59); "A Study of Pioneer Farming in the Fringe Areas of the Peace River, Alberta 1947," B.K. Acton and C.C. Spence (Bulletin No. 60); and "Land Settlement in North Eastern Alberta 1943," B.H. Kristjanson and C.C. Spence (Bulletin No. 63), Economics Division, Marketing Service, Dominion Department of Agriculture in co-operation with the Department of Political Economy, University of Alberta.

**Acknowledgments:** The co-operation of the farmers of the Debolt district with the Dominion Economics Division and the University of Alberta is gratefully acknowledged. The author also wishes to acknowledge the assistance of A.J. Pyrch in the field enumeration.

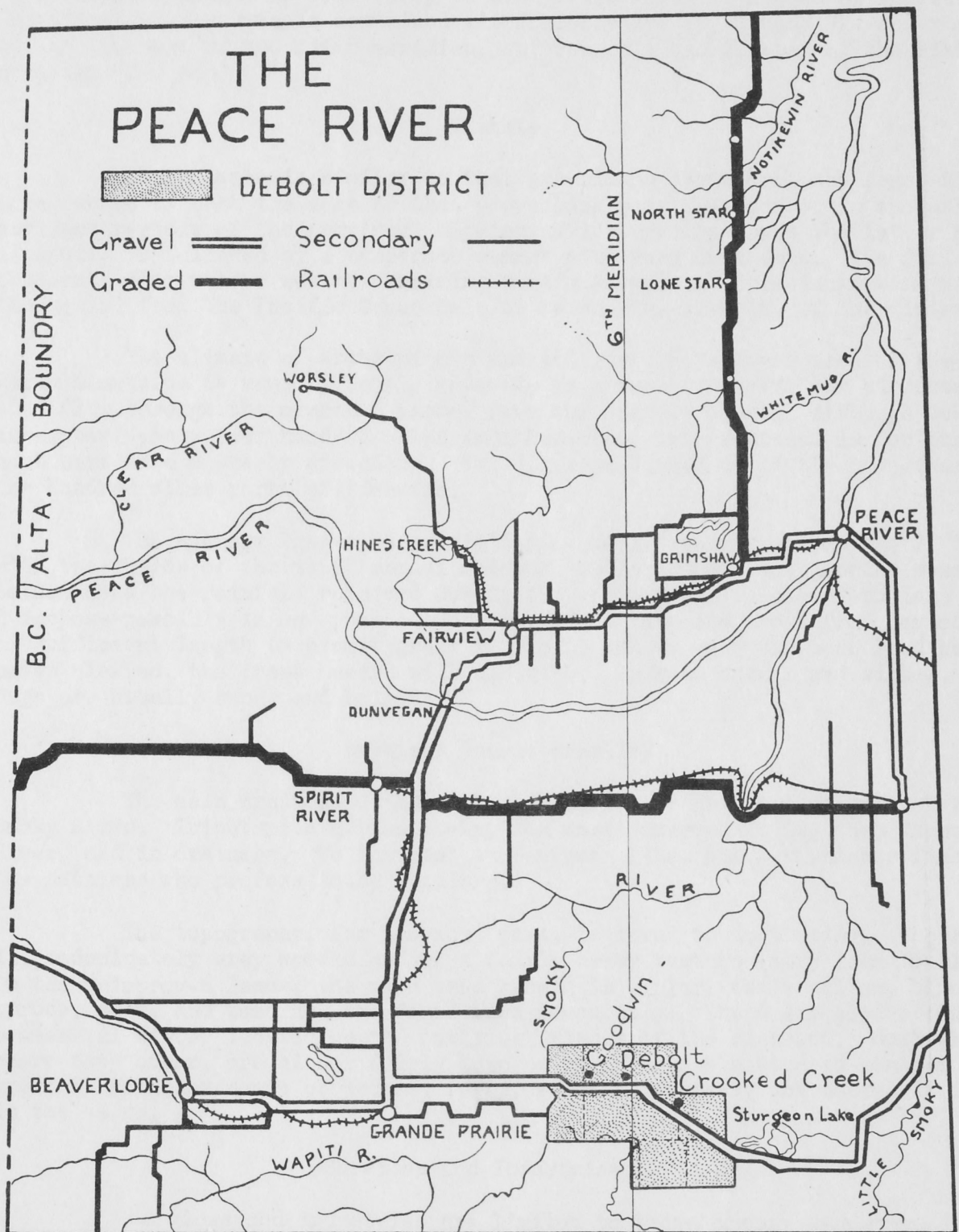
# THE PEACE RIVER



DEBOLT DISTRICT

Gravel Secondary

Graded Railroads





## DESCRIPTION OF THE AREA

The Debolt district borders the Edmonton to Grande Prairie highway between Sturgeon Lake and the Smoky River. Grande Prairie, which is the nearest rail shipping point, is from forty to sixty-five miles from most of the settlers. Specifically, the area is contained within townships 70, 71 and 72, and ranges 25 and 26, west of the fifth meridian, and ranges 1 and 2, west of the sixth meridian (See map).

### Climate

The climate is similar to that prevailing throughout the Peace River area, which is much the same as that prevailing near Edmonton or in the other parkland regions of the province. Spring, which usually comes the latter half of April, is followed by a temperate summer with very long days. The fall is pleasant, with colder weather arriving during November. Occasional warm winds (Chinooks) from the Pacific Ocean help to temper the severity of the winter.

The climate of areas within proximity of the eastern base of the Rocky Mountains is usually fairly moderate as a result of warm air currents that flow through the mountain passes from the Pacific Coast. Although Debolt is approximately four hundred miles from Edmonton, this distance is for the most part in a westerly direction. The district itself is little more than one hundred miles north of Edmonton.

The average long-time precipitation is between 16 inches and 17 inches, with two-thirds of the total annual moisture coming during the growing season. Seldom does the rainfall received during the growing season amount to less than 8 inches--possibly in one year out of six. As a rule the frost-free period is of sufficient length to permit grain to ripen, and as more and more land becomes cleared, the frost hazard will diminish. In both summer and winter, the days are usually sunny and bright.

### Physical Characteristics

The main drainage of the Debolt district is the deep channel of the Smoky River. Tributaries of the Smoky, the most important being the Simonette River, aid in drainage. To the east is Sturgeon Lake, which furnishes fish to the settlers who profess to be 'anglers.'

The topography, for the most part, is level to undulating. The soil is predominately grey wooded and of a fairly heavy texture (clay loam to clay). On the unimproved lands, the main tree growth is poplar, while willow, birch, spruce, pine, and tamarack are found less frequently. There are good stands of commercial timber located on the outlying fringes of the district. Muskegs, where they occur, are either fairly open or covered with a stunted coniferous growth. An undergrowth of sedges, ferns, woodland grasses, and mosses is found in the woods.

### Services and Industries

Services and industries are limited to those common to a rural community. There is a post office and general store at Goodwin, Debolt and Crooked Creek. Debolt is the main hamlet and has two general stores, a feed grinding mill, a restaurant, a curling rink, a community hall, and a school. The district nurse is also located here. Both bus and trucking services operate between Debolt and Grande Prairie. The only processing plant within the area is in the vicinity of Crooked Creek--it is a co-operative cheese factory sponsored by a group of Mennonites.

The main road passing through Debolt to Grande Prairie is part of the Alaska Highway. It is not yet an all-weather road, but gravelling will probably be completed in the near future. Other roads are trails through the bush that become difficult to travel in wet weather.

Grande Prairie, a town of some 1,700 population, is the business centre for Debolt district farmers. It provides the essential services of marketing, wholesaling, and retailing. Medical and dental services, public and high school facilities, and government administrative offices are all located there as well.

Lumbering is the only other industry becoming established in the Debolt district, aside from agriculture. Little timber was cut until the war years created a growing demand for lumber. This need has encouraged several individuals and companies to open up logging camps and small mills. The lumber is trucked from seventy to eighty miles to Grande Prairie for shipping.

#### THE HISTORY OF SETTLEMENT AND DEVELOPMENT

Prior to 1927, there were only a few people settled in the Debolt district. They were those who became tired during the long trek over the 'Edson Trail,'<sup>1/</sup> and 'squatted' on bush land which was some fifty miles from their goal, the open prairies near Grande Prairie; or they were those who came too late to secure homesteads on the choice prairies, and compromised by taking a bush farm in preference to returning to their place of origin.

Between 1927 and 1930, there was a large migration of people to the Peace River, and the Debolt district claimed a fair share of these new farmers. They arrived from all parts of the prairie provinces, with very little cash and almost no equipment or live stock. Throughout the 'thirties' many of them were only able to carry on because of the assistance from the State. They utilized their time in clearing and breaking a few acres of cropland, and in making other improvements to the farm that did not require a cash outlay.

The war brought with it increased demand and higher prices for agricultural produce. Hog enterprises could be quickly taken up with a small capital outlay, and they provided considerable income to Debolt farmers. About this time it was learned that the soil (grey wooded) of the district was particularly adapted to the production of legume seeds, such as alfalfa, alsike and altaswede clover. The prices paid for these seeds made it very profitable to grow them. Generally, the lot of these people has improved throughout the war years; they have more capital invested in their farms, more money in their pockets, and in some cases savings in the bank or in war bonds.

#### DEVELOPMENT AND PROGRESS OF THE AREA<sup>2/</sup>

Although the Debolt district encompasses a somewhat larger territory than does Local Improvement District<sup>3/</sup> No. 738, the trends as indicated by the

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<sup>1/</sup> 'Edson Trail' - A trail through the bush followed by settlers from Edson to Grande Prairie, before the completion of the railroad.

<sup>2/</sup> Tables I, II, and III will be found in the appendix, pages 19 and 20.

<sup>3/</sup> A Local Improvement District or L.I.D. is an unorganized Municipal District administered by the Provincial Department of Municipal Affairs.

census data for L.I.D. No. 738 are representative of the area as a whole. By using census data for L.I.D. No. 738, it is possible to note the progress of settlement and development of this area since 1916.

There were 14 farms and 51 people in L.I.D. No. 738 in 1916. Development was very slow until the late 'twenties,' when an influx of settlers boosted the number of farms by 1931 to 149, and the population on these farms to 414 people. Since 1931 the area has continued to expand. By 1941 there were 201 farms with a population of 730 people. In the fringe areas of the province, settlement for the most part resulted in land ownership by the homestead method. Thus, in such regions, the proportion of land that is owner-operated is very high. Of the 201 farms reported in the 1941 census, 138 were owner-operated and 49 were classed as part-owners. (Part-owners are those farmers who operate their own farms and rent additional land). There were only 12 farmers who farmed nothing but rented land.

In 1941, there were 55,160 acres of land occupied, of which 13,159 acres, or 24 per cent, were improved. Approximately 75 per cent of the improved land was seeded to cereals. Oats, the most important cereal crop grown, accounted for 50 per cent of the field crops acreage; wheat accounted for 25 per cent; and barley for 12 per cent.

With the outbreak of war, hogs became a very important source of income, if not the main source, to most Debolt farmers. The 1941 census reported 3,242 hogs in the area - an average of 17 per farm. In 1936, this average per farm was approximately 4 hogs. The cattle population remained relatively stable between 1931 and 1941, the numbers in the area ranging from 1,200 to 1,400 head. Sheep have been relatively unimportant as a source of farm income.

#### CURRENT ECONOMIC FACTORS AFFECTING FARMING

The rise in prices of farm products during the war years helped many settlers in the pioneer regions of the province to develop their farms and become firmly established. The significance of this rise is indicated by comparing the prices of the major farm products for the Debolt district during the year of the survey with the five-year prewar period. Using the latter period (1935-39) as a base period equal to 100, a comparison was made as follows:

1. Wheat: The index of the price of wheat in 1944 was 31 points above the base period of 100. It was not until 1942-43 that the price of wheat rose higher than it was during the 1935 to 1939 base period.

2. Hogs: The index of the price of hogs, because of overseas demand, has been well above the 1935 to 1939 period almost since the war began. In 1944 the index for hogs was 145.

3. Cattle: Cattle prices started to rise in 1939. The index now stands at 199.

4. Commodities and Services Used by Farmers, Combined with Farm Family Cost of Living: The government, by the use of price ceilings and subsidies, has attempted to discourage inflation and stabilize the price of consumer goods. A gradual increase in some consumer goods had pushed this index up to 130, which was 30 points above its 1939 level.



Fig. I. The feed chopping mill at the settlement of Debolt.

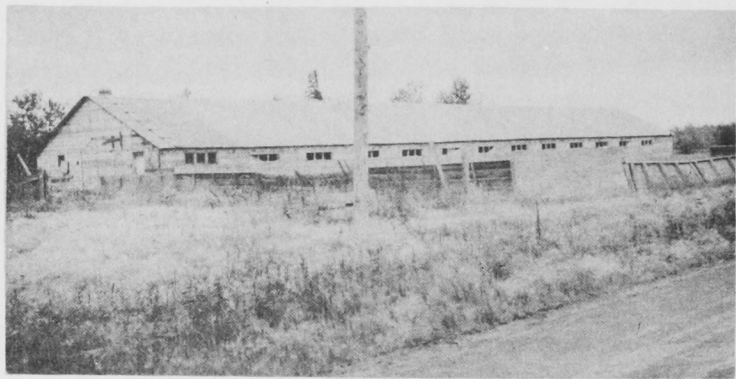


Fig. II. The curling rink at the settlement of Debolt.



Fig. III. The local cheese factory at Crooked Creek.



The relation between prices received for farm products and costs of things farmers have to buy is much more favourable to the farmer now than it was in the period following 1930. This favourable relationship between the prices of things the farmer has to sell and those he has to buy has aided settlers in the wooded areas in improving more land, acquiring efficient machinery, and also in many cases obtaining surplus for savings.

#### SOURCES OF DATA

A field party visited forty-five settlers in the Debolt district during the summer of 1945. By the use of a questionnaire, information was enumerated for each farm for the business year May 1, 1944 to May 1, 1945, on land utilization, receipts, farm expenses, living expenses, assets, liabilities, and so forth. Similar data were gathered in 1942 from eighty farmers in this area. The information volunteered by the settlers was studied and analysed, and the results compiled in this report.

#### LAND ACQUISITION AND TENURE<sup>1/</sup>

As mentioned earlier in this report, the big influx of settlers into the Debolt district occurred between 1927 and 1930. These settlers acquired their land mainly by the homestead method. Of the 45 farmers visited in 1945, 84 per cent acquired their first parcel of land by homesteading, 7 per cent by purchase, and 4 per cent had rented land. Those who started on purchased or rented farms presumably came after the better lands had been taken up. Consequently, they found it more profitable to begin operations on partially developed farms, where at least a few acres were already cleared for cropping.

Under the old homestead regulations, each settler was granted one quarter section. The tendency, however, has been for the size of farm to increase beyond this. Only 29 per cent of the settlers visited operate one quarter section farms at the present time. Forty per cent have acquired an additional quarter, and 31 per cent farm more than 320 acres.

In the wooded regions of the province, the homestead method of land acquisition resulted in most of the farms being owner-operated. In the Debolt district, 64 per cent of the farmers interviewed were classified as owners and 29 per cent as part-owners. The additional quarter, in many cases, was rented from an operator who had joined the Armed Services. Only 7 per cent of the settlers rented all of the land they were farming.

#### THE FERTILITY OF THE SOIL AND CROP YIELDS

Since the soils in the Debolt district are predominately grey wooded and of a fairly heavy texture, it is important that these soils must not only have their fertility maintained, but improved, in order to produce sufficient income, year in and year out, to support a permanent agricultural population. Therefore, crop rotation should be used which includes the seeding down of legumes and grasses, thus adding nitrogen and fibre to the soil.

Table 1 compares the grain yields of the Debolt district, Crop Districts 15 and 16, with those of the Province of Alberta. (The Debolt district is located on the west side of Crop District 15 and adjacent to Crop District 16. Because of the climate and location of the Debolt district, yield data for Crop District 16 are more representative than are those of Crop District 15). For the crop year 1944, average grain yields per acre

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<sup>1/</sup> Tables IV, V, and VI will be found in the appendix, pages 19 and 20.

at Debolt were: wheat, 17 bus., oats, 29 bus., and barley, 15 bus. In this particular year, Debolt yields and those of Crop District 16 were similar. Yields in Crop District 15 for the year 1944 were considerably higher. The Peace River region is a vast area and local conditions affect crops in any one particular year. The average grain yields from 1921 to 1944 for Crop Districts 15 and 16 were very similar, and yields at Debolt in the long run would be about the same.

Table 1.-Grain Yields per Acre of Debolt District, Crop Districts 15 and 16, and of Province of Alberta

	Wheat	Oats	Barley
	- bushels -		
<u>Year 1944</u>			
Debolt District	17	29	15
Crop District 15	25	40	30
Crop District 16	16	28	19
Province of Alberta	16	35	27
<u>Average of Years 1921 to 1944</u>			
Crop District 15	22	37	26
Crop District 16	21	38	25

The production of legume seeds, such as alfalfa, alsike, and alfaswede, is increasing in importance at Debolt. This enterprise, however, is still relatively new, and farmers generally lack both experience and specialized harvesting equipment to secure the best results. Because of this, dockage often runs as high as 40 per cent. A reasonable estimate of average yields would be: alfalfa, from 100 to 150 lbs. of seed per acre, and for the other clovers mentioned, about 200 lbs. per acre.

#### ORIGIN AND OTHER CHARACTERISTICS OF THE SETTLER<sup>1/</sup>

Of the 45 settlers visited, 51 per cent were of Anglo-Saxon origin, and almost all of the population spoke English fluently. A great many of the original settlers in the Peace River (1912-1918) came from Ontario, and these people have aided in quickly Canadianizing those who came from non-English-speaking countries.

About two-thirds of the farmers of the Debolt district were married, and the average number of children per family was three. The average age of the farm operator was 47 years.

<sup>1/</sup>

Tables VII, VIII, and IX will be found in the appendix, pages 20 and 21.

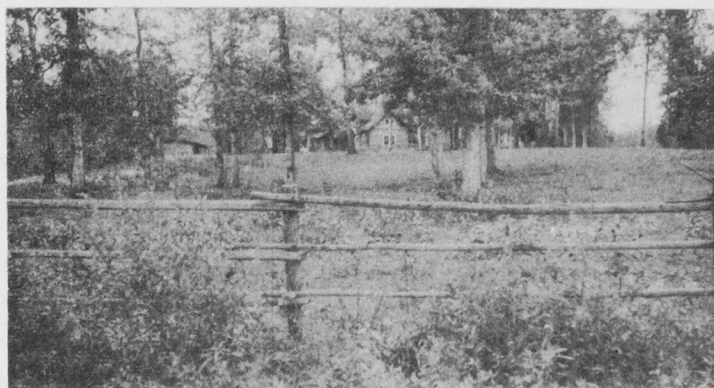


Fig. IV. A picturesque farmstead in the Debolt District, that is now abandoned.

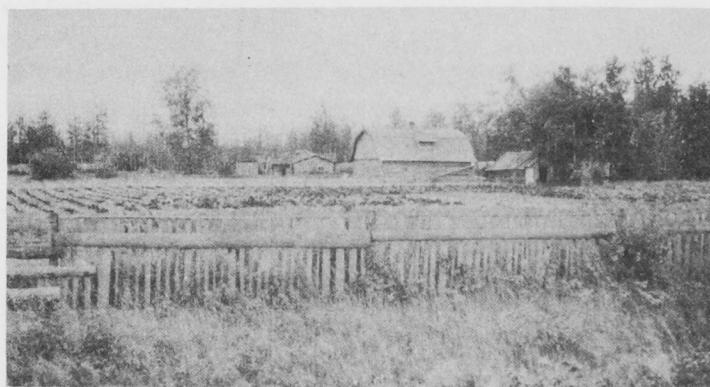


Fig. V. Settlers make use of logs in the construction of buildings.

# THE FARM BUSINESS 1945<sup>1/</sup>

## Type of Farming

In the Debolt district, 45 farm business records were taken for the business year May 1, 1944 to May 1, 1945. For analysis, a selection of these records was first made according to type of farming. The area is predominately a mixed farming one although there were a few off-type farms that did not conform to this general pattern. The 'off-type' farms were adjudged to be those having less than eight productive animal units.<sup>2/</sup> They were mostly bachelor farmers who derived income from crop sales and non-farm work. The balance, or thirty in all, were farms having eight or more productive animal units, and which might properly be classified as 'mixed farms.' Sales of crops, live stock, and farm produce made up the income on these farms. The mixed farms were divided into sub-groups and studied for the effect of size on the farm business. The 45 farm business records were thus grouped as follows:

1. Off-type Farms (15): Those farms having less than eight productive animal units.
2. Mixed Farms (30): Those farms having eight or more productive animal units.
  - (a) Small Mixed Farms (16): Those farms having less than 100 acres of cropland.
  - (b) Large Mixed Farms (14): Those farms having 100 acres or more of cropland.

## Size of Farm and Land Improvement

The size of farm most frequently found in the Debolt district was the one-half section unit, although farms varied in size from 160 acres up to several quarter sections. By groups, the size of farms and the improved acreages were: off-type farms, 256 acres with 88 acres improved; small mixed farms, 348 acres with 76 acres improved; and large mixed farms, 539 acres with 171 acres improved. The acreage of land improved when compared to total size of farms indicated that these farms were only partially improved. The record of the district for a period which averaged 14 years of settlement

<sup>1/</sup> Tables X to XVIII will be found in the appendix, pages 22 to 28.

<sup>2/</sup> The Number and Kinds of Productive Animal Units  
That Equal One Animal Unit

	<u>Animal Unit</u>	<u>Animal Unit If Sold During Year</u>
1 Cow or Bull	1.00	.5
1 Heifer or Steer	1.00	.5
1 Calf	.50	.2
1 Sheep	.14	.1
1 Sow or Boar	.20	.1
1 Hog	.10	.1
100 Hens	1.00	.5
50 Fowl (Other than Hens)	1.00	.5



shows that an average of 4.1 acres of new land was brought into cultivation each year. This is comparable to the rate of development of other wooded areas of the province where land improvement has been made by the axe and grub-hoe method. During the past year a crawler powered one-way brush cutter made its appearance in the Debolt district. This machine should speed up the rate of land improvement in the future. Some farmers, who hired the equipment for a couple of days last season, had as much as 30 acres of brush cut.

The settlers interviewed estimated that 77 per cent of the land operated was arable and suitable for cultivation. Only about 30 per cent of the land farmed was cultivated, while approximately 50 per cent of the holdings still awaited development.

### Cropping Practices

The recommended cropping practice for grey wooded soil suggests the seeding of between 25 per cent and 40 per cent of the land to legumes and grasses for maintenance and improvement of soil fertility. The legumes and grasses can be grown either for seed or for hay and pasture purposes. About 46 per cent of the improved acreage on off-type farms was seeded to cereals, 19 per cent to legumes and grasses, and 26 per cent was in summerfallow. This group harvested the legumes and grasses mainly as a seed crop. Nearly 70 per cent of the improved acreage on mixed farms was in cereal crops. The small mixed farmers had 20 per cent of their cropland in legumes and grasses, mostly for feed and pasture purposes, and they summerfallowed very little. On the other hand, the large mixed farmers summerfallowed about one-quarter of the improved acreage and grew very little of soil-improving crops. The present crop rotations for all groups could hardly be said to meet the recommended practice as stated earlier.

### Live Stock Numbers

The average number of productive animal units per farm by farm groups was: off-type, 2.9; small mixed, 16.2; and large mixed, 21.9. On the off-type farms, livestock was relatively unimportant in the farm organization, while on the mixed farms it contributed substantially to the sources of income. The small mixed farms sold an average of 16 hogs, and the large mixed farms an average of 26 hogs during the year.

Throughout the war years the Debolt district prospered because of hogs, and in 1942 it marketed little else in the way of farm products. It is interesting, then, to note that during the past year the hog population in this area has declined by approximately 27 per cent. There are a number of reasons for the decline in hog population. First, there has been a marked increase in the price of grain. (In 1944, a considerable quantity of grain was marketed from Debolt.) Second, farmers have been adjusting their farm organizations to a more balanced economy, which would include not only hogs as a marketable crop, but also grains, legume seeds, cattle and farm produce. Hog population was being adjusted according to housing facilities and labour available on these farms.



Fig. VI. The use of power equipment is becoming more common in the clearing of land.

Fig. VII. Small fields surrounded by bush are typical of the Debolt District.



Fig. VIII. Side roads are only trails through the bush.

## Distribution of the Farm Capital

The capital invested in the farms by groups averaged: on off-type farms, \$3,729; on small mixed farms, \$4,474; and on large mixed farms, \$8,774. Because of the organization on off-type farms, very little was invested in either live stock or equipment. On the small and large mixed farms, the value of live stock amounted to \$983 and \$1,284, and the value of machinery was \$731 and \$1,572, respectively. The per acre investment on both groups of mixed farms was the same, approximately \$55 per acre.

## Cash Receipts

The total cash receipts by groups were: on off-type farms, \$1,246; on small mixed farms, \$1,468; and on large mixed farms, \$2,669. Crop sales on off-type farms amounted to \$544, whereas income from live stock and farm produce was only about one-half of this sum. On the mixed farms, receipts from live stock and farm produce comprised approximately 50 per cent of the total income. Live stock and farm produce sales amounted to \$844 and \$1,379, respectively, on the small and large mixed farms, and receipts from crops accounted for \$192 and \$804 on the corresponding groups.

Because of the opening up of logging and lumbering camps within the area and the availability of other work such as on the Alaska Highway, non-farm receipts formed a substantial contribution to the total income. The off-type farmers, (mostly bachelor farmers who had their businesses so organized that they could remain away from the farm for long periods and thus avail themselves of the opportunities for non-farm employment), earned \$355 from outside sources. The small and large mixed farms derived \$288 and \$253, respectively, from non-farm work.

## Farm Expenses and Capital Expenditures

Total farm expenses on off-type farms amounted to \$763; on small mixed farms, \$1,015; and on large mixed farms, \$1,930. In all cases the current operating costs accounted for approximately 50 per cent of the total farm expenses, and the balance was expended on the building up of capital equipment, such as buildings, machinery, and live stock.

In the current operating costs, a non-cash charge was made for value and board of unpaid family labour. This charge to the farm was justified because farmers had to hire help where family labour was not available. Family labour was used only on the small and large mixed farms, and \$65 and \$149, respectively, were charged as expenses, according to the amounts of family help used.

## Family Living Expenses

The total living expenses included not only cash costs but also the value of perquisites (value of house use and farm produce used by the farm family). The living expenses, by farm groups, were: on off-type farms, \$620; on small mixed farms, \$979; and on large mixed farms, \$1,271. Cash expenditures for living were much higher on the off-type farms than on the other two groups; this was probably due to the fact that bachelors were unable to practise the many economies that are possible in a family unit.

In an operating statement, receipts and expenses are set down in summary form so that a farmer can determine his earnings for a given period of time (Table 2). On the receipts side, such items are included as cash income, net increase in inventory, and value of perquisites. On the expenses side a

	Farms with Less than 8 Animal Units	:	Farms with 8 or more Animal Units
		:	Acres Cropland Less than 100:100 or more
		- dollars -	
Cash Farm Receipts	891	1,180	2,415
Net Increase in Inventory	212	368	427
Total Receipts	1,103	1,548	2,842
Cash Farm Expenses	349	479	948
Capital Expenditures	414	471	833
Total Cash Expenses	763	950	1,781
Family Income from Farm	340	598	1,061
Cash Family Living Expenses	501	616	775
Family Surplus from Farm	-161	- 18	286
Cash Receipts, Non-Farm	355	288	253
Family Surplus from All Sources	194	270	539
Family Income from Farm	340	598	1,061
Value of Unpaid Labour and Board	--	65	149
Interest on Capital	187	224	439
Total Unpaid Labour and Interest	187	289	588
Operator's Labour Income	153	309	473
Value of Perquisites <sup>a/</sup>	119	363	497
Less Perquisites to Paid and Unpaid Labour	--	8	26
Perquisites to Operator	119	355	471
Operator's Labour Earnings	272	664	944
Number of Farms	15	16	14

1/ Adult Month - One adult month is the equivalent of one person over 14 years of age in the home one month; children 14 years of age or under equal one-half adult month.



charge for family labour and for interest on capital invested are made along with current cash and capital expenses. The change in inventory includes increases in stocks on hand, increases caused by capital improvements as well as depreciation of equipment and disposal of stocks carried over.

The surpluses, by farm groups, were: on off-type farms, \$194; on small mixed farms, \$270; and on large mixed farms, \$539. There are other measures for comparing farm earnings, but in pioneer regions the family net income or surplus is probably the most useful. In such areas, the main concern of the settler is to take in sufficient money to pay current operating and living expenses, and at the same time acquire some much-needed equipment.

The other measures of farm earnings do not take into account cash living expenses. One such measure is 'operator's labour income.' The family income is first obtained by deducting from gross receipts and inventory increases, cash expenses and any decrease in inventory. A charge is then made for the value and board of unpaid labour and for interest on capital investment (in this study an interest rate of 5 per cent is used). The operator's labour incomes, by farm groups, were: On off-type farms, \$153; on small mixed farms, \$309; and on large mixed farms, \$473.

If to the 'operator's labour income' is added the value of perquisites used on the farm, another measure of farm earnings is derived, namely, 'operator's labour earnings.' By groups, the operator's labour earnings were: on off-type farms, \$272; on small mixed farms, \$664; and on large mixed farms, \$944.

The off-type farms had lower earnings by all measures than did the mixed farms. This group was comprised of the farms that did not emphasize live stock production. The large mixed farms, or those having over 100 acres of cropland, had greater earnings by all measures than did the small mixed farms. More improved acres meant higher production capacity and thus higher earnings.

#### Net Worth

'Net worth' is the total assets less the total liabilities, and the 'change in net worth' is the difference in 'net worth' between any two points of time. Change in net worth is an indication of progress or lack of progress. In May, 1945, the net worth of the farmers interviewed, by farm groups, was: off-type farms, \$3,798; small mixed farms, \$4,148; and large mixed farms, \$9,570. (Table 3). These sums included not only the amounts invested in the farm business, but also other assets such as bonds or bank savings. In the wooded regions of the province where most farms are still in the pioneer stage of development, credit has been extended in only limited amounts. As a consequence, liabilities were relatively small on the farms studied. The liabilities by the respective farm groups were \$63, \$249, and \$389.

All groups of farms showed substantial increases in net worth during the business year. These increases were either in cash or in capital assets, such as real estate improvements, more machinery or greater numbers of live stock. The increases in net worth were \$154, \$187, and \$343, respectively, for off-type, small mixed, and large mixed farms.

Table 3.-Net Worth Statement by Size of Farm as of May 1, 1945<sup>a/</sup>  
Debolt District 1945

	Farms with Less than 8 Animal Units	Farms with 8 or more Animal Units	Acres Cropland Less than 100 100 or more
- dollars			
<u>1944</u>			
Total Assets	3,685	4,084	9,508
Liabilities	41	123	281
Net Worth	3,644	3,961	9,227
<u>1945</u>			
Total Assets	3,861	4,397	9,959
Liabilities	63	249	389
Net Worth	3,798	4,148	9,570
Change in Net Worth, 1944-45	+ 154	+ 187	+ 343
Number of farms	15	16	14

<sup>a/</sup>

Net Worth is calculated for the operator only,--where whole or part real estate is rented, landlord's part is not included.

#### Summary of the Farm Business

The foregoing farm business analysis has been a descriptive story of the land utilization, capital investment, receipts, expenses (including living costs) and progress of settlers in the Debolt district for the business year May 1, 1944 to May 1, 1945. For purposes of analysis, the farms were first grouped according to type; that is, off-type farms, or those farms having less than 8 productive animal units; and mixed farms, or those farms with 8 or more productive animal units. The latter group was divided into sub-groups according to number of acres cropland; namely, small mixed farms with less than 100 acres cultivated, and large mixed farms with 100 acres or more cultivated. After the settlers paid from their total receipts the current expenses (farm operating, capital and living expenses), they had left for payment of debts or for savings, by respective groups: off-type farms, \$194; small mixed farms, \$270; and large mixed farms, \$539.

As previously mentioned, both the demand for and prices of agricultural products were relatively good during the past few years. If prices were to fall some, could the present earnings be maintained and, if not, would they be sufficient to allow the settler to continue to develop the farm and at the same time receive a reasonable level of living? In a subsequent section, an attempt will be made to estimate the earnings on farms in the wooded regions with long-time average yields and prices for a budget farm set-up.

# THE FARM BUSINESS, 1942 AND 1945

It was mentioned earlier in this report that during the summer of 1942 an extensive study of farming in the Peace River area was undertaken, which included the Debolt district as one of the areas surveyed. The same schedule was used in both 1942 and 1945 for the enumeration of the information. With comparable data for these two periods, it is possible to compare the operations and earnings of Debolt farmers as between 1942 and 1945, and the effect on their living.

Table 4 shows the land utilization, capital investment, receipts, expenses and earnings of the farms studied in the two particular years. War-time demands and prices for agricultural products aided in increasing farm receipts. More money was available to settlers to acquire equipment and to develop their farms into more efficient units.

Table 4.-A Comparison of Farm Businesses in the Debolt District for the Years 1942 and 1945

	The Farm Business 1942	The Farm Business 1945
	- acres -	
<u>Land Use</u>		
Acres Operated	241	377
Acres Cropland	77	108
Acres Seeded to Cereals	50	66
Acres Seeded to Legumes and Grasses	12	13
Average Yield of Wheat per Acre	15	17
Average Number of Productive Animal Units	13	14
	- dollars -	
<u>Distribution of Farm Capital</u>		
Real Estate	1,642	3,523
Live Stock	927	844
Equipment	497	907
Feed, Seed and Supplies	167	290
Total	3,233	5,564
<u>Receipts</u>		
Crops	47	500
Live Stock and Farm Produce	704	826
Other Farm	137	144
Non-Farm	82	299
Total Cash Receipts	970	1,767
Net Increase in Inventory	300	335
Total Receipts	1,270	2,102
<u>Farm Expenses</u>		
Cash Farm Operating Expenses	375	582
Capital Expenditures	217	565
Total	592	1,147
Family Income	678	955
Cash Family Living Expenses	401	629
Net Income to Family	277	326
Cash Living Expenses per Adult per Month	10	19
Number of Family Adult Months	39	33
Number of Farms	62	45

Between 1942 and 1945, farms increased in size. Settlers either purchased or rented additional land. In the latter case, some farmers assumed the responsibility of operating the holdings of those who had joined the Armed Services. The average size of farm was 241 acres with 77 acres of cropland in 1942, and 377 acres with 108 acres improved in 1945. The 31-acre increase in cropland resulted from settlers improving more land, acquiring more cultivated land through purchasing or renting more quarters, or from both. Cereal acreage increased from 50 to 66 acres. The amount of land seeded to legumes and grasses remained about the same, namely 13 and 14 acres, respectively.

The average number of productive live stock units per farm was 13 in 1942 and 14 in 1945. For the two periods under review, the live stock numbers were relatively the same, although data indicated that the number of animal units per farm had been greater just prior to 1945. The 1945 survey showed a decline in the hog population of 27 per cent during the year.

Farm capital increased from \$3,233 in 1942 to \$5,564 in 1945. Capital items that showed marked changes were real estate and equipment. During this period the value of real estate almost doubled, due to some extent to an inflationary trend, but mainly because of bigger farms, larger improved acreages and more adequate buildings. At the same time, settlers were utilizing surplus cash for the purchase of much-needed machinery and were thus able to avoid delays necessitated by having to borrow a plow, drill or binder from a nearby neighbour. With more equipment, the operator was preparing himself for eventually handling larger improved acreages. Between 1942 and 1945 the value of machinery increased from \$497 to \$907 per farm.

Total receipts per farm were \$1,270 in 1942 and \$2,102 in 1945. Important changes occurred in annual crop sales and income from non-farm sources. The few extra acres of improved land in 1945 allowed settlers to sell crops to the extent of \$500, whereas in 1942 all of the grain produced was needed for feed, and sales amounted to only \$47. In the latter period more farmers were also setting aside a few acres of legumes for seed purposes--with adequate yields and current prices the production of legume seeds is very remunerative. Non-farm receipts increased from \$82 in 1942 to \$299 in 1945. This change resulted from the availability of employment in logging and lumber camps and so forth. Whether the present opportunities for securing non-farm work will continue is very difficult to forecast.

Although total receipts increased by \$832 per year, this sum was not all profit to the farmer. There was an upward rise in farm operating costs from \$375 to \$582 per year. The farmer also spent \$565 in 1945 as compared with \$217 in 1942 on capital goods. This increase in capital expenditures was in line with the trend for farmers to acquire more adequate machinery, better buildings, and to further develop their farms. The 'family income,' or total receipts less farm operating and capital expenses, was \$678 in 1942 and \$955 in 1945.

Between 1942 and 1945, the cash family living expenses changed from an average of \$401 per year, or \$10 per adult per month, to \$629 per year, or \$19 per adult per month. It is doubtful if an increase from \$10 to \$19 per adult per month can be all attributed to the rise in cost of living. In fact, it was obvious after visiting the settlers in both periods that they had a better level of living in 1945 than in 1942.



The 'net income to the family' is derived by deducting from the family income the cash family living costs. This surplus is available for the payment of debts or for savings. In 1942 the surplus was \$277 and in 1945 it was \$326. Settlers had approximately \$50 more in 1945 than in 1942, for the payment of debts or for savings, and were able to enjoy a higher level of living. Wartime demands and prices for agricultural products enabled farmers to make greater earnings and to build their farms into more efficient units.

Two other comparisons were made of the farm businesses of the Debolt district for the years 1942 and 1945, which indicated changes similar to those just described. This information has been set out in Tables 17 and 18 of the appendix.<sup>1/</sup> Table 17 is a comparison of 15 farms studied in 1942 and again in 1945. Table 18 is a comparison of selected farms which were similar as to type of farming practised and size of business as indicated by the number of acres of cropland.

#### PROBABLE RETURNS OF THE AVERAGE FARM

It has been pointed out previously in this report that during the war years both the demand for and prices of agricultural products have been somewhat better than normal. The question then arises--what would be the earnings on the average farm in the Debolt district under more normal conditions? An answer was sought to this question by setting up a hypothetical or budget farm, and using long-time average yields and prices to estimate probable income.

Eight farms studied in 1945 were considered as being representative of the area. They averaged about a half section in size, had between 80 and 120 acres cultivated or an average of 101 acres of cropland, and more than 8 productive animal units. The budget farm was set up on a basis comparable to the averages of the eight farms studied, with minor adjustments being made in the farm organization so that it might conform to a workable pattern, incorporating certain recommended farming practices.

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<sup>1/</sup> Table 17 may be found on page 26 of the appendix, and Table 18 on page 27 of the appendix.

## Size of Farm--Cropping Practices and Yields

The budget farm was assumed to be a half-section with 100 acres under cultivation for cropping purposes. A 10-year rotation<sup>1/</sup> was used, which included a reasonable acreage of legumes (both for seed and pasture) for soil improvement purposes. The long-time average yields for Crop District 15 were used for calculating the total yields expected on the budget farm. Seventy per cent of the wheat and 85 per cent of the legume seeds produced were sold. This was the practice on the eight farms studied that were considered to be representative of the area. In 1942 all of the grain produced in the Debolt district was used locally for feed. By 1945, mainly because improved acreages had increased, the farmers had a surplus of grain for sale at the elevators. Although the practice of producing wheat for sale on grey wooded soils cannot be recommended, it is probable that as more land becomes cleared farmers will grow a surplus of grain which will be disposed of at the country elevator. On the budget farm, a few acres of alfalfa were set aside for seed production, and the average expected yield estimated at 150 lbs. per acre. As a seed crop, alfalfa was the most popular in the area although other legumes were also grown, such as alsike, altaswede, and sweet clover. These other clovers usually produced better than alfalfa, but the additional yield was offset by a lower price. The hay and pasture and the remaining grain was used on the farm for seed and livestock feeds.

## Livestock

The amount of livestock carried on the budget farm was similar to the average numbers found on the 8 farms studied. It was estimated that 2,500 lbs. of cattle and 6,000 lbs. of hogs (live weight) would be sold annually.

1/

The crop rotation used is a 10-year one recommended for grey wooded soils in the publication, "Cropping for Profit and Permanency," by W.E. Bowser and A.G. McCalla. Bulletin No. 44, University of Alberta, Edmonton, Alberta.

The plan requires a division of the cultivated acreage into 10 fields, as follows:

- Field 1 - Grain
- Field 2 - Grain as a nurse crop with clover, grasses, or clover-grass mixtures
- Field 3 - Hay or seed (legume or grass seed)
- Field 4 - Hay or seed (legume or grass seed)
- Field 5 - Pasture
- Field 6 - Breaking of clover or grass land
- Field 7 - Grain
- Field 8 - Grain
- Field 9 - Grain
- Field 10 - Fallow

This rotation allows for 50 per cent of the cultivated land being in grain, 30 per cent in legumes and grasses, and 20 per cent in breaking and summerfallow.

### Prices and Other Estimates for Budget Farm

Wheat.-The price used was 70.7 cents per bushel. This was the 1935 to 1944 average price of No. 3 Northern at Ft. William less 16.8 cents per bushel freight Grande Prairie to Vancouver.

Alfalfa Seed.-The price used was 20 cents per pound. This was the estimated average price for alfalfa seed over a period of years.

Cattle.-The price used was 6.04 cents per pound. This was the 1935 to 1944 average price of medium steers up to 1,050 pounds at Edmonton less 0.36 cents per pound freight Grande Prairie to Edmonton.

Hogs.-The price used was 8.84 cents per pound. This was the 1935 to 1944 average price of bacon hogs at Edmonton less 0.36 cents per pound freight Grande Prairie to Edmonton.

Farm Produce.-The average income from this source on the 8 farms being used as representative was reduced by 30 per cent, or to the approximate 1935 to 1944 average of the index numbers for the period.

Non-Farm Income.-The prices used were estimated from the average non-farm income on the 8 farms studied and from previous similar studies. It was felt that the present level would not be maintained, but neither would there be less opportunity for work off the farm than there was in the years previous to 1942.

Cash Farm Expenses.-The average cash farm expenses on the 8 farms studied were reduced by 14 per cent, or to the average of the indexes of 1935 to 1944, which equalled 106 for commodities and services used by farmers, including tax and interest rates.

Depreciation.-The maintenance charge on machinery of 14 per cent and on buildings of 5 per cent was calculated on a total capitalization of \$1,800, which had been used in previous similar studies.

Cash Living Expenses.-The average cash living expenses on the 8 farms studied were reduced by 14 per cent, or to the average of the indexes of 1935 to 1944, which equalled 109. This allowed the same level of living, only at a lower cost.

### Family Net Income from all Sources

The receipts, cash expenses and net incomes are set out in Table 5, for the typical farm and for the average of the 8 farms studied. The family net income or surplus was: for the budget farm, \$215, and for the average of 8 farms studied, \$677. This amount is what the settler would have for payment of debts or for savings. It will be noted again that long-time average yields and prices were used in the determination of earnings on the budget farm.

A settler on a farm having 100 acres improved, by following the recommended farming practices, could expect to earn annually approximately \$215 per year as a surplus for payment of debts or for savings.

At this rate, it would take several years to pay off the initial capital indebtedness if the farmer started in business by borrowing. Even if he started free from debt, \$215 is not a very large annual sum with which to further develop a farm--that is, improve more land, construct other buildings, purchase additional needed equipment, and increase the numbers of breeding stock. The expenditures on cash living are much lower than those generally found in areas where farming has been established for a longer period. Settlers in the grey wooded regions will wish to raise their level of living as the earning capacity of the farms increases with further development. With these facts in mind, it is recommended that 100 acres of improved land are a minimum requirement in order for a settler to become established on an efficient and full-time farming basis in a reasonable length of time.

Information concerning the Debolt district would lead one to conclude that there is room for additional settlement and this would aid in consolidating the present community. But the determination of the extent of this, as in a large part of the Peace River country, must await the completion of the soil surveys which are now being made.



# APPENDIX

Table I.-Population, Number and Tenure of Farms 1916 to 1941<sup>a/</sup>  
Local Improvement District No. 738<sup>b/</sup>

Year	Rural Population	Number of Farms	Owners	Part- Owners	Tenants	Managers
- number -						
<sup>c/</sup> 1916	51	14				
1921	104	13	12	--	1	--
1926	77	31	22	7	2	--
1931	414	149	120	26	3	--
1936	621	170	133	33	4	--
1941	730	201	138	49	12	2

<sup>a/</sup> Census of Canada

<sup>b/</sup> A Local Improvement District (L.I.D.) is an unorganized Municipal District administered by the Provincial Department of Municipal Affairs.

<sup>c/</sup> Data on farm tenure not given in 1916 Census.

Table II.-Total Acres, Acres Improved and Acres in Field Crops  
of Occupied Farms 1916 to 1941<sup>a/</sup>  
Local Improvement District 738

Year	Total	Improved	Field Crops	Wheat	Oats	Barley	Proportion of Land Improved
- acres -							- per cent -
1916	2,197	215	183	38	125	--	10
1921	2,880	250	235	--	--	--	9
1926	8,335	1,072	820	109	388	47	13
1931	35,811	4,228	3,610	1,105	1,792	499	12
1936	49,906	7,419	6,586	2,481	3,012	285	15
1941	55,160	13,159	9,710	2,473	4,187	1,200	24

<sup>a/</sup> Census of Canada

a/  
Census of Canada

Acquisition	Number	Percentage
Homestead or Soldier's Grant	38	84
Purchased	3	7
Rented	4	4
Total	49	100

Size	Number	Percentage
One-quarter section	13	29
One-half section	18	40
Three-quarter section or over	14	31
Total	45	100

Table VI.-Distribution of Land Tenure, Debolt District, 1945

Tenure	Number	Percentage
Owners	29	64
Part-Owners	13	29
Renters	3	7
Total	45	100

Table VII.-Distribution of Origin of Farm Operators, Debolt District, 1945

Origin	Number	Percentage
Anglo-Saxon	23	51
Western Europeans (Scandinavian, German and French)	20	45
Central Europeans and Russians	2	4
Total	45	100

Table VIII.-Distribution of Birthplace of Farm Operators  
Debolt District, 1945

Birthplace	Number	Percentage
Alberta	7	15
Canada (excluding Alberta)	17	38
United States	8	18
British Isles	8	18
Other	5	11
Total	45	100

Table IX.-Distribution of Conjugal State, Age of Farm Operator, and Number of Children per Farm Family, Debolt District, 1945

	Number	Percentage
<u>Conjugal State</u>		
Married	30	68
Single	14	32
Total	44	100
Average Age of Operator	47 years	
Average Number of Children per Family	2.8	

Table X.-Present and Potential Use of Land by Size of Farm Debolt District 1945

	Farms with less than 8 Animal Units	Farms with 8 or more Animal Units	
			Acres Cropland
			Less than 100 or more
<u>Present Use - Average per Farm</u>			
			- acres -
Cropland	86	74	169
Farmstead	2	2	2
Total Improved	88	76	171
Total Unimproved	168	272	368
Total Operated	256	348	539
<u>Potential Use - Average per Farm</u>			
			- acres -
<u>Land Owned by Operator</u>			
Improved	71	60	131
Unimproved Arable	85	142	156
Unimproved Non-Arable	25	50	122
Total Owned	181	252	409
			- per cent -
Proportion of Total Improved	39	24	32
Proportion of Total Unimproved Arable	47	56	38
Total Arable	86	80	70
Number of Farms	15	16	14



Table XI.-Distribution of Crops by Size of Farm for the Year 1944  
Debolt District 1945

	Farms with Less than 8 Animal Units	:	Farms with 8 or more Animal Units	
		:	<u>Acres Cropland</u>	
		:	Less than 100 or 100 more	
		:		
		- per cent -		
Wheat	19		30	30
Oats	27		31	30
Barley	--		7	7
Legume Seed	13		6	2
Hay and Pasture	6		14	3
Other Crops	3		2	1
Summerfallow	26		7	22
Breaking	6		3	5
Total	100		100	100
Number of Farms	15		16	14

Table XII.-Average Numbers of Live Stock at the End of Year and Sold  
by Size of Farm, Debolt District 1945

	Farms with Less than 8 Animal Units	:	Farms with 8 or more Animal Units	
		:	<u>Acres Cropland</u>	
		:	Less than 100 or 100 more	
<u>Horses</u>		:		
	- number -			
Sold	--		--	--
End of Year	3		6	6
<u>Cattle</u>				
Sold	1		3	4
End of Year	1		12	15
<u>Hogs</u>				
Sold	8		22	47
End of Year	4		16	26
Average Number of Productive Animal Units per Farm (Excluding Horses)	2.9		16.2	21.9
Decrease in Hogs on Hand from Beginning to End of Year	2		2	12
Per Cent Decrease	36		14	32
Number of Farms	15		16	14

Table XIII.-Distribution of Farm Capital by Size of Farm  
as of May 1, 1945<sup>a</sup> Debolt District 1945

	Farms with Less than 8 <u>Animal Units</u>	:	Farms with 8 or more <u>Animal Units</u>	:	<u>Acres Cropland</u> Less than 100 or 100 more	:
		- dollars -				
Farm Real Estate	2,707		2,578		5,476	
Live Stock	285		983		1,284	
Equipment	472		731		1,572	
Value of Feed, Seed and Supplies	265		182		442	
Total	3,729		4,474		8,774	
Number of Farms	15		16		14	

a/ Farm capital is calculated on a farm unit basis. Where rented, landlord's capital is included with operator's in calculations.

Table XIV.-Sources and Amounts of Receipts by Size of Farm  
Debolt District 1945

	Farms with Less than 8 Animal Units	:	Farms with 8 or more Animal Units
		:	<u>Acres Cropland</u>
		:	Less than 100 or 100 more
		:	
	- dollars -		
<u>Farm</u>			
Cattle	51	157	122
Hogs	200	486	1,032
Other Live Stock	9	4	6
Total Live Stock	260	647	1,160
Crop	544	192	804
Other Farm Produce	32	197	219
Other	55	144	233
Total Farm	891	1,180	2,416
Non-Farm	355	288	253
Total Receipts	1,246	1,468	2,669
Number of Farms	15	16	14

Table XV.-Farm Expenses and Capital Expenditures by Size of Farm  
Debolt District 1945

	Farms with Less than 8 Animal Units	Farms with 8 or more Animal Units	Acres Cropland	
			Less than 100	100 or more
- dollars -				
Taxes	37	56	73	
Custom Work	137	104	213	
Paid Labour	--	14	55	
Other	174	305	607	
Cash Farm Expenses	348	479	948	
Value and Board of Unpaid Labour	--	65	149	
Farm Expenses	348	544	1,097	
Capital Expenditures	415	471	833	
Total Farm Expenses	763	1,015	1,930	
Number of Farms	15	16	14	

Table XVI.-Cash and Non-Cash Living Costs by Size of Farm  
Debolt District 1945

	Farms with Less than 8 Animal Units	:	Farms with 8 or more Animal Units
		:	<u>Acres Cropland</u>
		:	Less than 100 or 100 more

- dollars

Average per Farm

Cash Family Board	244	330	351
Other Family Expenses	257	286	424
Total Cash Expenses	501	616	775
Total Value of Perquisites <sup>a/</sup>	119	363	496
Total Living	620	979	1,271

Average per Adult per Month

Cash Board	18	7	9
Other Family Expenses	19	6	10
Total Cash Expenses	37	13	19
Total Value Perquisites <sup>a/</sup>	8	8	12
Total Living	45	21	31
Total Number of Family Adult Months <sup>b/</sup>	14	45	41
Number of Farms	15	16	14

<sup>a/</sup> Perquisites - Value of house use (rent) and farm produce used by the farm family.

<sup>b/</sup> Thirteen out of 15 were bachelor-operated farms.



Table XVII.-A Comparison of the Businesses of the Same Farms  
in the Debolt District for the Years 1942 and 1945

	The Farm Business 1942	The Farm Business 1945
<hr/>		
	- acres -	
<u>Land Use</u>		
Total Operated	294	375
Cropland	89	105
Seeded to Cereals	56	69
Seeded to Legumes & Grasses	12	16
<hr/>		
Average Number of Productive Animal Units	10	15
<hr/>		
	- dollars -	
<u>Distribution of Farm Capital</u>		
Real Estate	1,563	3,702
Live Stock	875	969
Equipment	487	695
Feed, Seed & Supplies	242	256
<hr/>		
Total	3,167	5,622
<hr/>		
<u>Receipts</u>		
Crops	68	531
Live Stock and Farm Produce	599	975
Other Farm	229	79
Non-Farm	92	220
<hr/>		
Total Cash Receipts	988	1,805
Net Increase in Inventory	360	440
<hr/>		
Total Receipts	1,348	2,245
<hr/>		
<u>Farm Expenses</u>		
Cash Farm Operating Expenses	300	625
Capital Expenditures	220	545
<hr/>		
Total	520	1,170
<hr/>		
Family Income	828	1,075
<hr/>		
Cash Family Living Expenses	432	670
<hr/>		
Surplus to Family	396	405
<hr/>		
Cash Living Expenses per Adult per Month	10	17
<hr/>		
Number of Family Adult Months	41	39
<hr/>		
Number of Farms	15	15
<hr/>		

Table XVIII.-A Comparison of the Businesses of Farms of Similar Size and Type in the Debolt District for the Years 1942 and 1945

	The Farm Business 1942	The Farm Business 1945
<hr/>		
	- acres -	
<u>Land Use</u>		
Total Operated	375	343
Cropland	95	101
Seeded to Cereals	70	71
Seeded to Legumes and Grasses	8	14
Average Number of Productive Animal Units	15	20
<hr/>		
	- dollars -	
<u>Distribution of Farm Capital</u>		
Real Estate	1,910	3,690
Live Stock	1,042	1,248
Equipment	564	618
Feed, Seed and Supplies	207	238
Total	3,723	5,794
<u>Receipts</u>		
Crop	68	348
Live Stock and Farm Produce	911	1,154
Other Farm	187	95
Non-Farm	43	147
Total Cash Receipts	1,209	1,744
Net Increase in Inventory	296	664
Total Receipts	1,505	2,408
<u>Farm Expenses</u>		
Cash Farm Operating Expenses	421	563
Capital Expenditures	177	516
Total	598	1,079
Family Income	907	1,329
Cash Family Living Expenses	452	652
Surplus to Family	455	677
Cash Living Expenses per Adult per Month	12	14
Number of Family Adult Months	39	45
Number of Farms	15	8



